

REMARKS/ARGUMENTS

Claims 1-33 were originally presented.

Claims 1-4, 6, 11, 13, 22, 25, 28-29 and 32 are currently amended.

Claims 5, 9, 16, 23-24, and 30-31 are canceled without prejudice.

Claims 4 and 32 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 1-4, 6-8, 10-15, 17-22, 25-29, and 32-33 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,725,022 to Clayton et al. (hereinafter "Clayton") in view of Applicant's own admission as to prior art in the present specification.

Claims 1-4, 6-8, 10-15, 17-22, 25-29 and 32-33 remain in this application.

In view of the following remarks, Applicant respectfully requests reconsideration of the rejected claims and allowance of the subject application.

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Telephone Conversation with Examiner

Applicant wishes to thank the Examiner for the telephonic conversation on August 3, 2005. Applicant particularly appreciates the Examiner's preliminary indication of the novel and nonobvious nature of the functionality of the SRC button (element 48 in FIG. 1) in selecting between a first list of primary audio control bands and a second list of conditional audio control bands.

35 U.S.C. §112 second paragraph

Claims 4 and 32

Claims 4 and 32 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office asserts that claims 4 and 32 contain typographical errors in their claim dependency. Applicant has amended claims 4 and 32 to correct their dependency, thus vitiating this rejection.

35 U.S.C. §103(a)

Claims 1-4, 6-8, 10-15, 17-22, 25-29 and 32-33

Claims 1-4, 6-8, 10-15, 17-22, 25-29 and 32-33 are rejected under 35 U.S.C. §103(a) as being unpatentable over Clayton in view of Applicant's own admission as to prior art in the present specification. Applicant respectfully traverses the rejection.

Amended independent claim 1 recites:

An in-vehicle audio browser comprising:
a first set of buttons configured to select a preset item;
a second button configured to select between a first list of items and a second list of items associated with the audio browser, wherein the first list comprises a first plurality of bands including primary audio control bands and the second list comprises a second plurality of bands including conditional audio control bands;
a third button configured to cycle through and select a desired band from the list of items selected by the second button; and
a fourth button configured to activate a function that varies depending on the selected band.

One intention of one exemplary implementation of the subject application is to anchorate several problems found in the prior art. For example, as more functions are added to car stereos (or other vehicle computer systems), it may be necessary to add additional buttons to the car stereo to support the new functions. It is important, however, to *minimize the number of changes* to the current car stereo model to allow the user the easiest adoption path for the new functionality and *minimize the negative effects of pulling more secondary activities into the car environment*. Adding a significant number of new buttons to support the new car stereo functions may distract the driver from the primary task of driving the vehicle. Therefore it is important to provide a usability model that is *familiar to the user of the car stereo to minimize distractions while driving the vehicle*.

The combination of Clayton and the Applicant's own admission as to prior art in the present specification fails to teach or suggest the apparatus of claim 1. In particular, the combination fails to teach or suggest "a second button configured to

1 select between a first list of items and a second list of items associated with the
2 audio browser, wherein the first list comprises a first plurality of bands including
3 primary audio control bands and the second list comprises a second plurality of
4 bands including conditional audio control bands".

5 Instead, Clayton teaches a screen displaying a vertical list of all possible
6 audio and information channels, including music, talk, TV audio, recorded audio,
7 personalized directory services and information services. (Column 9, lines 17-26;
8 and FIG. 2). Audio broadcasts are not organized by the band or frequency of the
9 station. (Column 6, lines 8-11). The available audio and information channels
10 may be navigated through the use of four channel selector buttons. (Column 9,
11 lines 14-18).

12 For example, in the instance a user wishes to listen to rock music from a
13 radio station, the up and down channel selector buttons may be used to go up and
14 down the vertical list of all possible channels. (Column 9, lines 30-35). Once the
15 "music" selection is encountered, and highlighted, the user may press a forward
16 channel selector button. (Column 9, lines 30-33). This will key the display to
17 render another vertical list presenting all of the subcategories of content available
18 in the "music" category, such as "blues", "dance", "talk" and "sports". (Column 9,
19 lines 35-40). In total, more than 30 different categories can be displayed.
20 (Column 9, lines 36-39). In like fashion, the user can navigate through this
21 vertical list using the up and down channel selector buttons in order to highlight a
22 desired genre, such as "rock", which can be selected by pressing the forward
23 channel selector button. (Column 9, lines 45-47). The result will be the
24 presentation of a vertical listing of possible station frequencies which the user can
25

1 navigate using the up and down channel selector buttons, with each station's audio
2 content being played whenever the station is highlighted. (Column 9, lines 47-51).

3 Thus, according to Clayton, in order to find a single rock radio station, a
4 user must navigate through 4 vertical lists containing as many as 30 or more items.
5 As a result, Clayton represents the very prior art that Applicant sought to
6 overcome, since the use of the audio device taught in Clayton may take so much
7 effort as to distract the driver from the primary task of driving the vehicle.
8 Moreover, since Clayton involves a new layout -- as well as the enhanced use of a
9 video display -- the user must learn a whole new system apart from the traditional
10 controls used in conventional car audio systems.

11 Additionally, since Clayton relies on a long vertical list of all possible audio
12 and information channels, Clayton teaches away from "a second button configured
13 to select between a first list of items and a second list of items associated with the
14 audio browser, wherein the first list comprises a first plurality of bands including
15 primary audio control bands and the second list comprises a second plurality of
16 bands including conditional audio control bands" as recited in claim 1

17 Applicant's own admission as to prior art in the present specification offers
18 no missing teachings. Rather, the prior art presented in the specification of the
19 subject application is limited to existing car stereo systems in which a particular
20 band must be chosen from multiple available bands, such as AM, FM1, FM2, and
21 CD, where the selected band represents the operating state of the car stereo. (Page
22 1, lines 7-10). Essentially, all of the available bands are presented to a user in a
23 linear listing, representing the same organization and presentation as is taught in
24 Clayton.
25

1 The differences between the in-vehicle audio browser recited in claim 1 and
2 the apparatus taught by the combination of Clayton and Applicant's own
3 admission as to prior art in the present specification are pronounced, since by using
4 the second button recited in claim 1, a user may break the list of all possible audio
5 and information channels roughly in half. Moreover, since the lists are
6 conveniently grouped into primary audio control bands and conditional audio
7 control bands, at a glance the user can quickly locate the list having a band desired
8 by the user.

9 Moreover, the audio browser recited in claim 1 may be constructed to
10 resemble a conventional car stereo in appearance and function. As such, users can
11 be spared the adoption costs of learning a whole new way of using an audio
12 browser, such as would be encountered in switching over to the apparatus taught
13 by Clayton.

14 In rejecting claim 1, the Office relies on FIG 2; Column 9, lines 1-51;
15 Column 10, lines 26-26; and Column 5, line 67 - Column 6, line 13 of Clayton.
16 (Office Action, Page 2-3). The Office concedes, however, that Clayton fails to
17 teach a "third button configured to select between a first list of items and a second
18 list of items associated with the audio browser". (Office Action, Page 3). The
19 Office relies on the specification of the subject application at pages 1-2 as teaching
20 this missing element. (Office Action, Page 3). Applicant respectfully submits that
21 this reasoning is flawed.

22 As discussed in more detail above, both Clayton and Applicant's own
23 admission as to prior art in the present specification teach presenting a user with a
24 linear listing of all of the bands available in a vehicle entertainment system. This
25 is markedly less efficient than using "a second button configured to select between

1 a first list of items and a second list of items associated with the audio browser,
2 wherein the first list comprises a first plurality of bands including primary audio
3 control bands and the second list comprises a second plurality of bands including
4 conditional audio control bands" as recited in claim 1. A linear list, or a plurality
5 thereof such as taught in Clayton, requires a user to spend an inordinate amount of
6 time navigating through items in order to progress towards a desired band. During
7 this process, the driver must divert precious attention from the task of driving. In
8 contrast, the second button of claim 1 drastically reduces the time needed to find a
9 desired band by enabling the user to toggle between two conveniently organized
10 groups of bands.

11 Accordingly, a combination of Clayton and Applicant's own admissions as
12 to prior art in the present specification fails to disclose, teach, or suggest the in-
13 vehicle audio browser of claim 1. Applicant respectfully requests that the §103(a)
14 rejection of claim 1 be withdrawn.

15 Dependant claims 2-4, 6-8, and 10-12 are allowable at the least by virtue
16 of their dependency on base claim 1, as well as for the additional elements they
17 contain. Applicant respectfully requests that the §103(a) rejection of claims 2-4, 6-
18 8, and 10-12 be withdrawn.

19 Amended Independent claim 13 recites:

20
21 An in-vehicle audio browser comprising:
22 a first button configured to select between a set
23 of primary audio control bands and a set of conditional audio
24 control bands;
25 a second button configured to select a band
from the set of bands selected by the second button; and

1 a third set of buttons configured to select a
2 preset item, wherein the preset item is dependant on the
3 selected band.

4 The combination of Clayton and the Applicant's own admission as to prior
5 art in the present specification fails to teach or suggest the apparatus of claim 13.
6 In particular, the combination fails to teach or suggest "a first button configured to
7 select between a set of primary audio control bands and a set of conditional audio
8 control bands".

9 Instead, as discussed in more detail above, according to Clayton, selecting a
10 single item such as a rock radio station, may involve navigating through 4 vertical
11 lists containing as many as 30 or more items. Consequently, Clayton represents
12 the very prior art that Applicant sought to overcome, since the use of the audio
13 device taught in Clayton takes so much effort as to distract the driver from the
14 primary task of driving the vehicle. Moreover, since Clayton involves a new
15 layout -- as well as the enhanced use of a video display -- the user must learn a
16 whole new system apart from the traditional controls used in conventional car
17 audio systems.

18 Applicant's own admission as to prior art in the present specification offers
19 no missing teachings. Rather, the prior art presented in the specification of the
20 subject application is limited to existing car stereo systems in which a particular
21 band must be chosen from multiple available bands, such as AM, FM1, FM2, and
22 CD, where the selected band represents the operating state of the car stereo. (Page
23 1, lines 7-10). Essentially, all of the available bands are presented to a user in a
24 linear listing, representing the same organization and presentation as is taught in
25 Clayton.

1 The differences between the in-vehicle audio browser recited in claim 13
2 and the apparatus taught by the combination of Clayton and Applicant's own
3 admission as to prior art in the present specification are pronounced, since by using
4 the first button recited in claim 13, a user may break the list of all possible audio
5 control bands roughly in half. Moreover, since the sets recited in claim 13 are
6 conveniently grouped into primary audio control bands and conditional audio
7 control bands, at a glance the user can quickly locate the set having a band desired
8 by the user.

9 Moreover, the audio browser recited in claim 13 may be constructed to
10 resemble a conventional car stereo in appearance and function. As such, users can
11 be spared the adoption costs of learning a whole new way of using an audio
12 browser, such as would be encountered in switching over to the apparatus taught
13 by Clayton.

14 In rejecting claim 13, the Office relies on the some portions of Clayton and
15 Applicant's own admission as to prior art in the present specification as cited in its
16 rejection of claim 13. (Office Action, Page 5). Applicant respectfully submits that
17 this reasoning is flawed.

18 As discussed in more detail above, both Clayton and Applicant's own
19 admission as to prior art in the present specification teach presenting a user with a
20 linear listing of all of the bands available in a vehicle entertainment system. This
21 is markedly less efficient than using "a first button configured to select between a
22 set of primary audio control bands and a set of conditional audio control bands" as
23 recited in claim 13. A linear list, or a plurality thereof such as taught in Clayton,
24 requires a user to spend an inordinate amount of time navigating through list
25 elements in order to progress towards a desired band. During this process, the

1 driver must divert precious attention from the task of driving. In contrast, the first
2 button of claim 13 drastically reduces the time needed to find a desired band by
3 enabling the user to toggle between two conveniently organized sets of bands.

4 Accordingly, a combination of Clayton and Applicant's own admissions as
5 to prior art in the present specification fails to disclose, teach, or suggest the in-
6 vehicle audio browser of claim 13. Applicant respectfully requests that the
7 §103(a) rejection of claim 13 be withdrawn.

8 **Dependant claims 14-15, and 17-18 are allowable at the least by virtue of**
9 **their dependency on base claim 13, as well as for the additional elements they**
10 **contain. Applicant respectfully requests that the §103(a) rejection of claims 14-15,**
11 **and 17-18 be withdrawn.**

12
13 **Independent claim 19 recites:**

14 A user interface for an in-vehicle audio browser, the
15 user interface comprising:

16 a source button to select between a set of
17 primary audio control bands and a set of conditional audio
18 control bands;

19 a band button to select a band from the selected
20 set of audio control bands; and

21 a display device coupled to the band button for
22 displaying the band currently selected by the band button.

23 The combination of Clayton and the Applicant's own admission as to prior
24 art in the present specification fails to teach or suggest the user interface of claim
25 19. In particular, the combination fails to teach or suggest "a source button to
select between a set of primary audio control bands and a set of conditional audio
control bands".

1 Instead, as discussed in more detail above, according to Clayton, selecting a
2 single item such as a rock radio station, may involve navigating through 4 vertical
3 lists containing as many as 30 or more items. Consequently, Clayton represents
4 the very prior art that Applicant sought to overcome, since the use of the audio
5 device taught in Clayton takes so much effort as to distract the driver from the
6 primary task of driving the vehicle. Moreover, since Clayton involves a new
7 layout -- as well as the enhanced use of a video display -- the user must learn a
8 whole new system apart from the traditional controls used in conventional car
9 audio systems.

10 Applicant's own admission as to prior art in the present specification offers
11 no missing teachings. Rather, the prior art presented in the specification of the
12 subject application is limited to existing car stereo systems in which a particular
13 band must be chosen from multiple available bands, such as AM, FM1, FM2, and
14 (D), where the selected band represents the operating state of the car stereo. (Page
15 1, lines 7-10). Essentially, all of the available bands are presented to a user in a
16 linear listing, representing the same organization and presentation as is taught in
17 Clayton.

18 The differences between the user interface recited in claim 19 and the
19 apparatus taught by the combination of Clayton and Applicant's own admission as
20 to prior art in the present specification are pronounced, since by using the source
21 button recited in claim 19, a user may break the list of all possible audio control
22 bands roughly in half. Moreover, since the sets are conveniently grouped into
23 primary audio control bands and conditional audio control bands, at a glance the
24 user can quickly locate the set having a band desired by the user.
25

1 Additionally, the user interface recited in claim 19 may be constructed to
2 resemble a conventional car stereo in appearance and function. As such, users can
3 be spared the adoption costs of learning a whole new way of using an audio
4 browser, such as would be encountered in switching over to the apparatus taught
5 by Clayton.

6 The Office does not state with specificity the passages it relied on in
7 Clayton and the Applicant's own admission as to prior art in the present
8 specification in rejecting claim 19. In good faith, Applicant infers that these
9 passages are the same as those relied on above in the rejection of claims 1 and 13.

10 As discussed in more detail above, both Clayton and Applicant's own
11 admission as to prior art in the present specification teach presenting a user with a
12 linear listing of all of the bands available in a vehicle entertainment system. This
13 is markedly less efficient than using "a source button to select between a set of
14 primary audio control bands and a set of conditional audio control bands" as
15 recited in claim 19. A linear list, or a plurality thereof such as taught in Clayton,
16 requires a user to spend an inordinate amount of time navigating through list
17 elements in order to progress towards a desired band. During this process, the
18 driver must divert precious attention from the task of driving. In contrast, the
19 source button of claim 19 drastically reduces the time needed to find a desired
20 band by enabling the user to toggle between two conveniently organized sets of
21 bands.

22 Accordingly, a combination of Clayton and Applicant's own admissions as
23 to prior art in the present specification fails to disclose, teach, or suggest the user
24 interface of claim 19. Applicant respectfully requests that the §103(a) rejection of
25 claim 19 be withdrawn.

1 **Dependant claims 20-22, and 25** are allowable at the least by virtue of
2 their dependency on base claim 19, as well as for the additional elements they
3 contain. Applicant respectfully requests that the §103(a) rejection of claims 20, 22,
4 and 25 be withdrawn.

5 **Independent claim 26 recites:**

6 One or more computer-readable media having stored thereon
7 a computer program that, when executed by one or more processors,
8 causes the one or more processors to:

9 display a currently selected car radio band, wherein the
10 car radio supports a primary audio control band and a conditional
11 audio control band;

12 changing the currently selected car radio band in
13 response to activation of a first car radio button; and

14 moving through a list of items associated with the
15 currently selected car radio band in response to activation of a
16 second car radio button.

17 The combination of Clayton and the Applicant's own admission as to prior
18 art in the present specification fails to teach or suggest the one or more computer-
19 readable media of claim 26. In particular, the combination fails to teach or suggest
20 "display a currently selected car radio band, wherein the car radio supports a
21 primary audio control band and a conditional audio control band" and "changing
22 the currently selected car radio band in response to activation of a first car radio
23 button".

24 Instead, as discussed in more detail above, according to Clayton, selecting a
25 single item such as a rock radio station, may involve navigating through 4 vertical
lists containing as many as 30 or more items. Consequently, Clayton represents
the very prior art that Applicant sought to overcome, since the use of the audio
device taught in Clayton takes so much effort as to distract the driver from the

1 primary task of driving the vehicle. Moreover, since Clayton involves a new
2 layout -- as well as the enhanced use of a video display -- the user must learn a
3 whole new system apart from the traditional controls used in conventional car
4 audio systems.

5 Applicant's own admission as to prior art in the present specification offers
6 no missing teachings. Rather, the prior art presented in the specification of the
7 subject application is limited to existing car stereo systems in which a particular
8 band must be chosen from multiple available bands, such as AM, FM1, FM2, and
9 CD, where the selected band represents the operating state of the car stereo. (Page
10 1, lines 7-10). Essentially, all of the available bands are presented to a user in a
11 linear listing, representing the same organization and presentation as is taught in
12 Clayton.

13 The differences between the one or more computer-readable media recited
14 in claim 26 and the apparatus taught by the combination of Clayton and
15 Applicant's own admission as to prior art in the present specification are
16 pronounced, since by using the first car radio button recited in claim 26, a user
17 may break the list of all possible audio control bands roughly in half. Moreover,
18 since the audio control bands are conveniently grouped into a primary audio
19 control band and conditional audio control band, at a glance the user can quickly
20 locate the group having a particular band desired by the user.

21 Additionally, the one or more computer-readable media recited in claim 26
22 may be used to construct an in vehicle audio browser resembling a conventional
23 car stereo in appearance and function. As such, users can be spared the adoption
24 costs of learning a whole new way of using an audio browser, such as would be
25 encountered in switching over to the apparatus taught by Clayton.

1 The Office does not state with specificity the passages it relied on in
2 Clayton and the Applicant's own admission as to prior art in the present
3 specification in rejecting claim 26. In good faith, Applicant infers that these
4 passages are the same as those relied on above in the rejection of claims 1, 13 and
5 19.

6 As discussed in more detail above, both Clayton and Applicant's own
7 admission as to prior art in the present specification teach presenting a user with a
8 linear listing of all of the bands available in a vehicle entertainment system. This
9 is markedly less efficient than "display a currently selected car radio band, wherein
10 the car radio supports a primary audio control band and a conditional audio control
11 band" and "changing the currently selected car radio band in response to activation
12 of a first car radio button" as recited in claim 26.

13 A linear list, or a plurality thereof such as taught in Clayton, requires a user
14 to spend an inordinate amount of time navigating through list elements in order to
15 progress towards a desired band. During this process, the driver must divert
16 precious attention from the task of driving. In contrast, the first car radio button of
17 claim 26 drastically reduces the time needed to find a desired band by enabling the
18 user to toggle between two conveniently organized sets of bands.

19 Accordingly, a combination of Clayton and Applicant's own admissions as
20 to prior art in the present specification fails to disclose, teach, or suggest the one or
21 more computer-readable media of claim 26. Applicant respectfully requests that
22 the §103(a) rejection of claim 26 be withdrawn.

23 Dependant claims 27-29, and 32-33 are allowable at the least by virtue of
24 their dependency on base claim 26, as well as for the additional elements they
25

CONCLUSION

Respectfully Submitted,

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